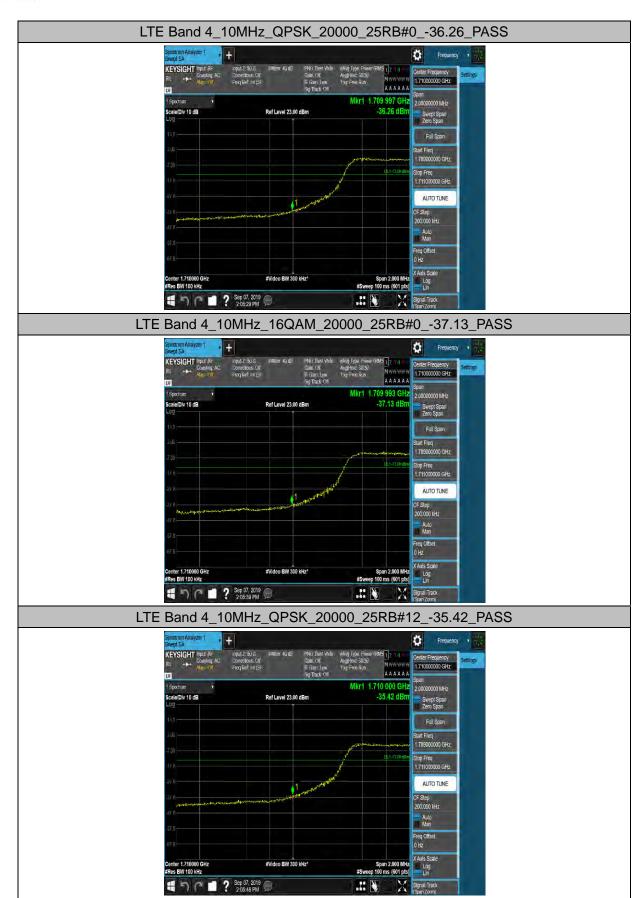
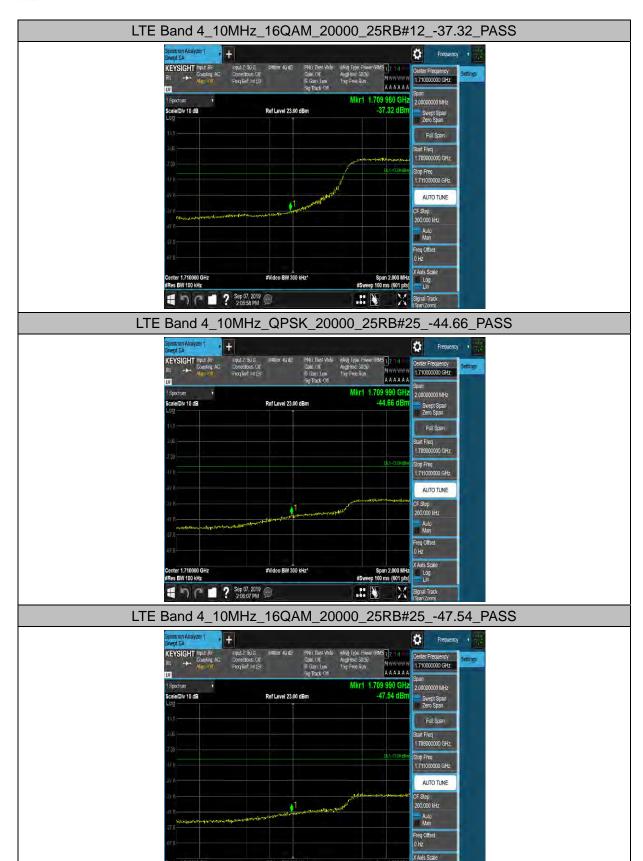


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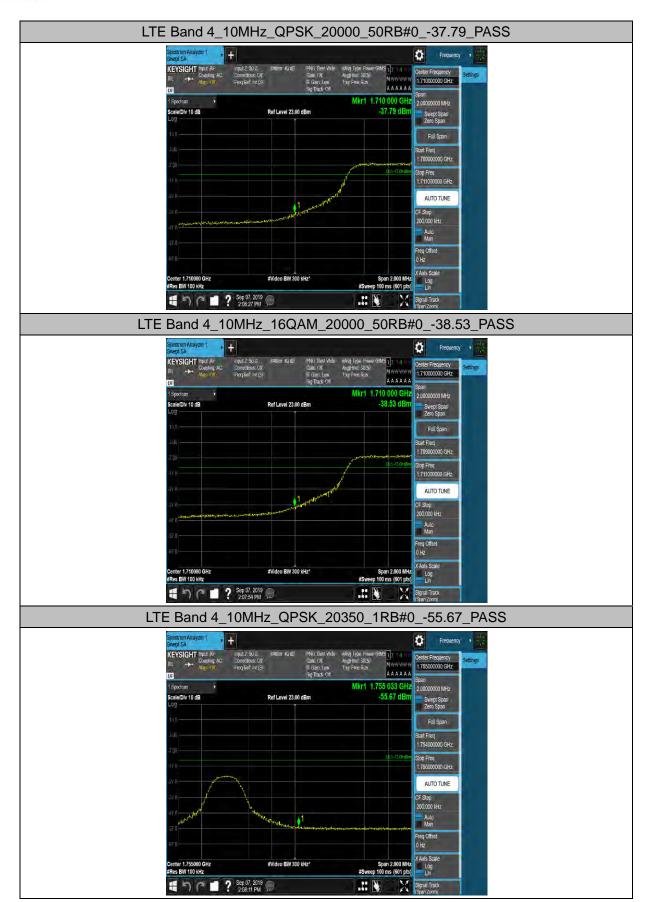
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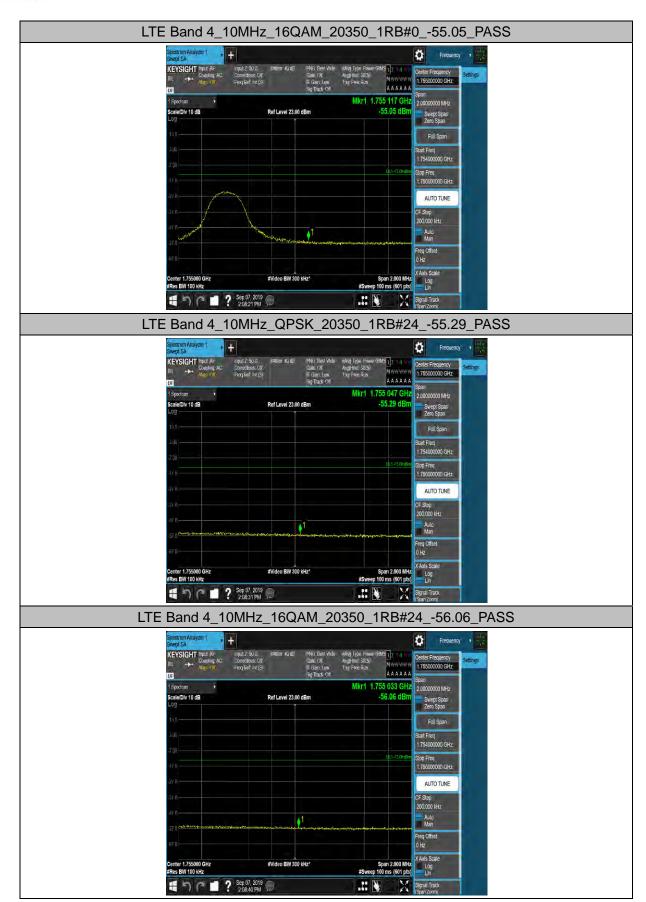




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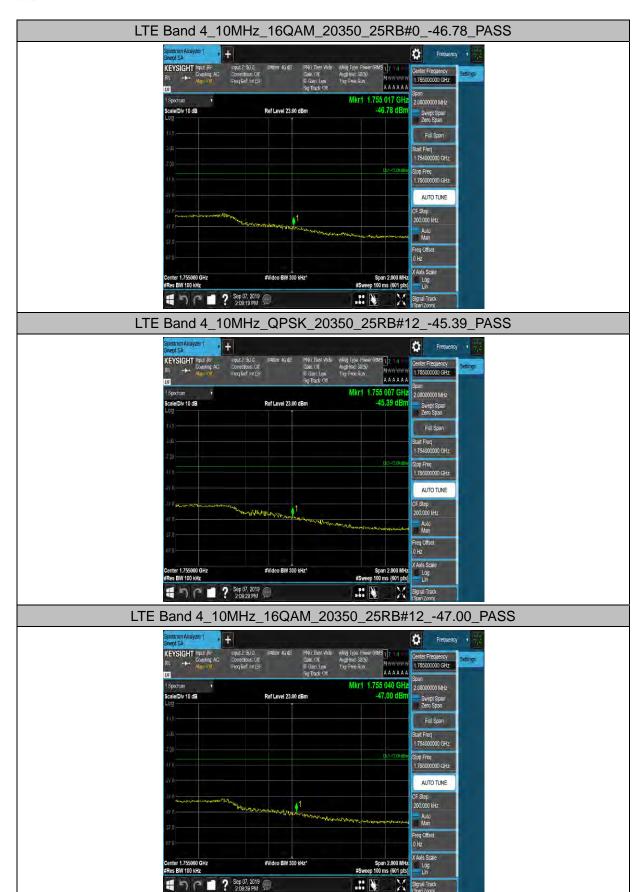




LTE Band 4_10MHz_QPSK_20350_1RB#49_-35.69_PASS | Committee | Comm



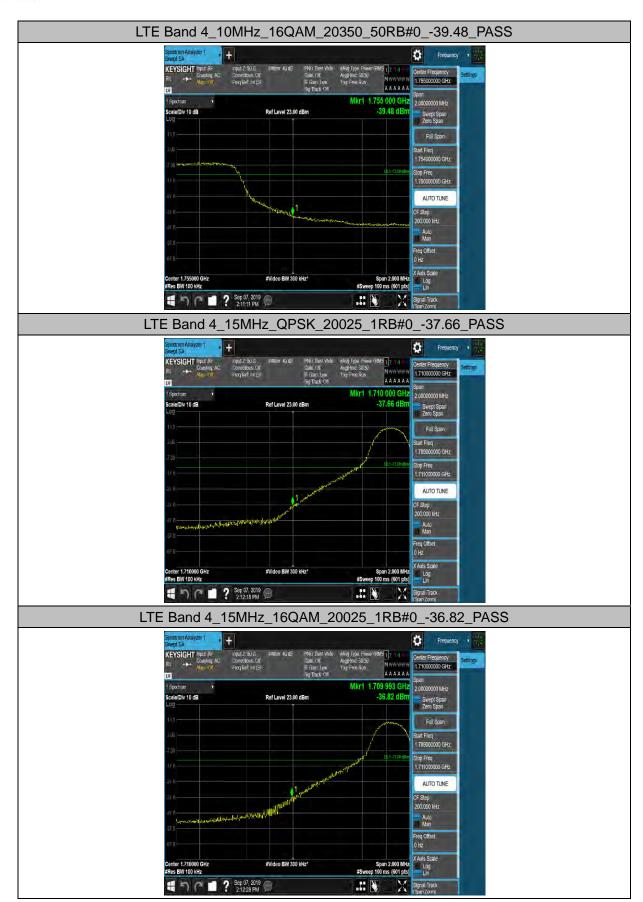


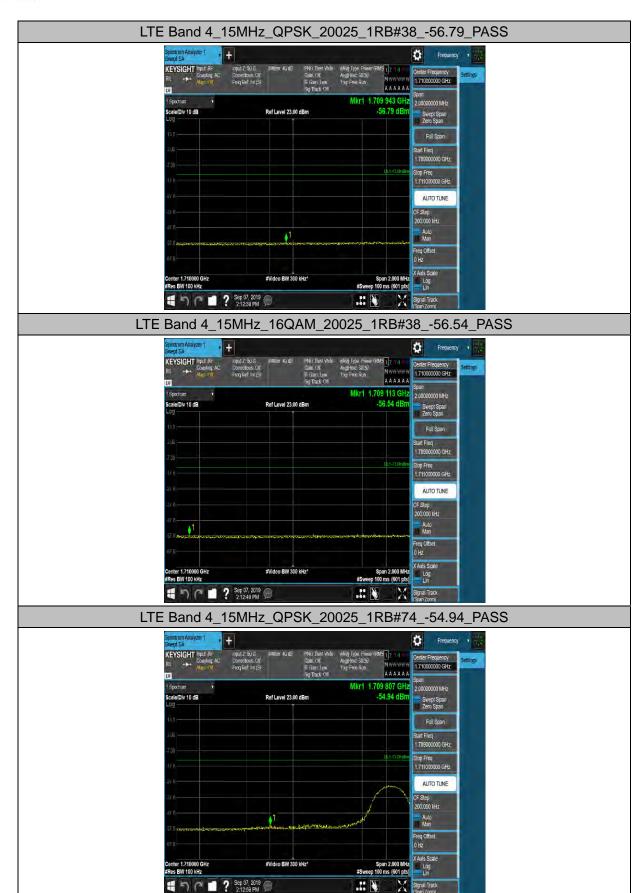


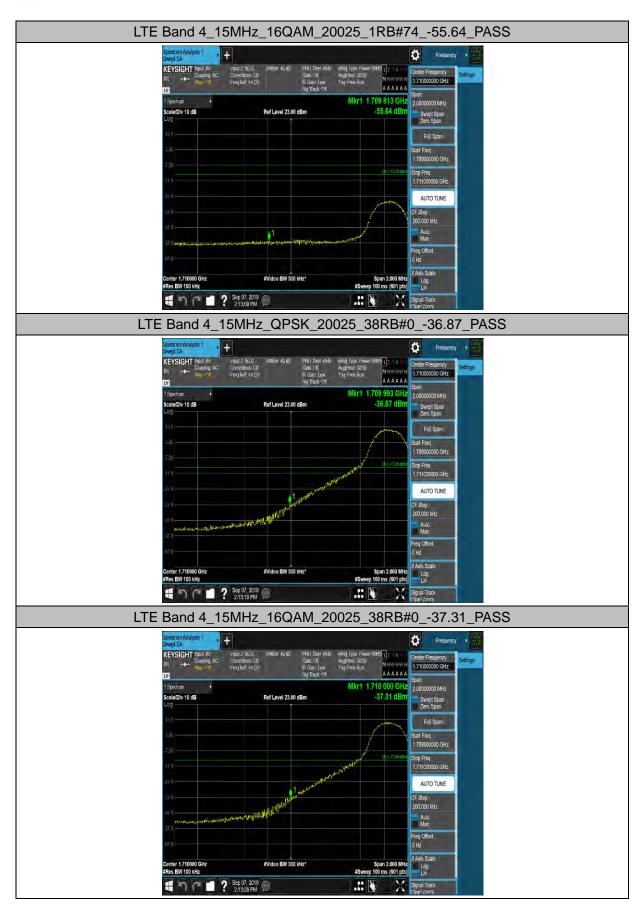








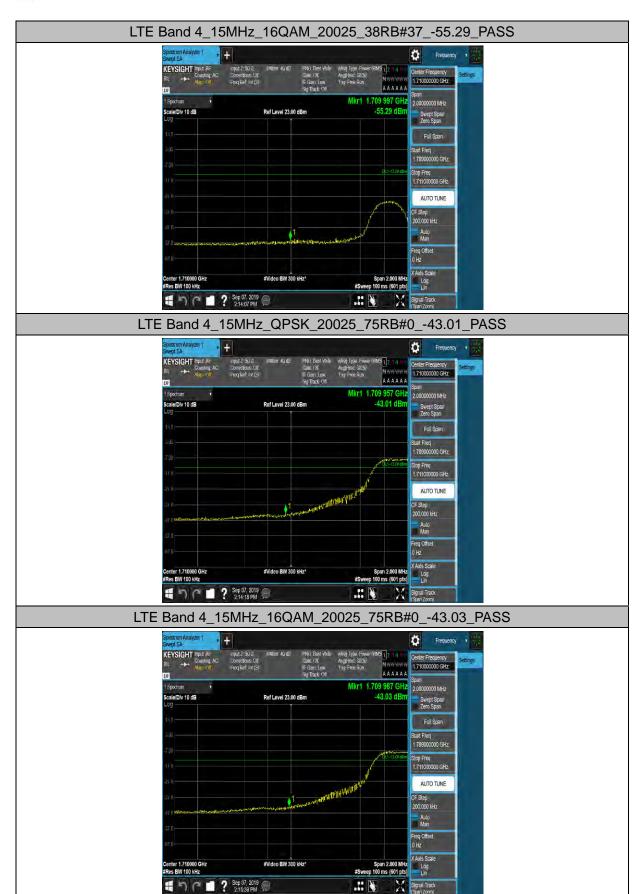


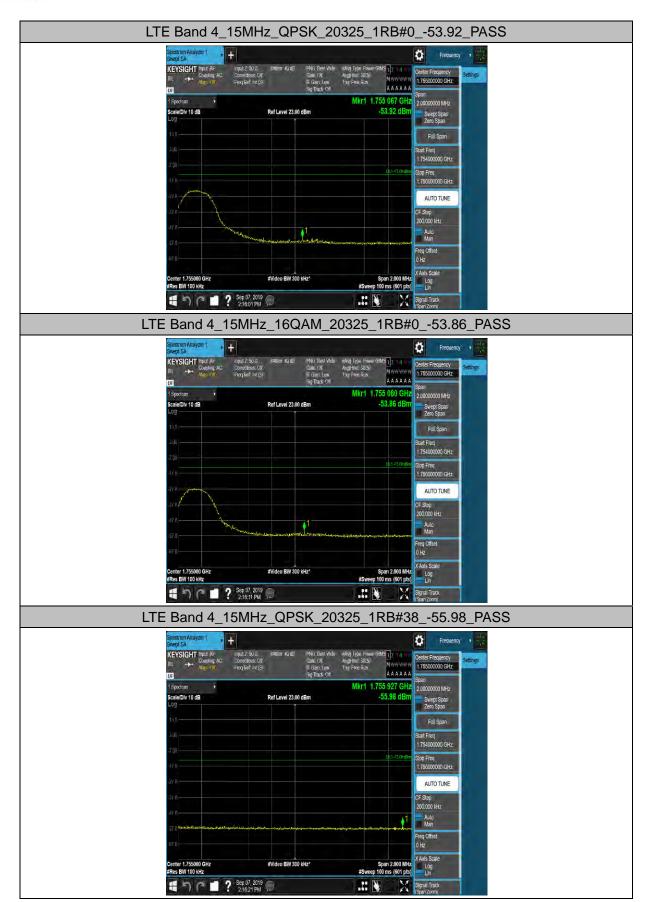


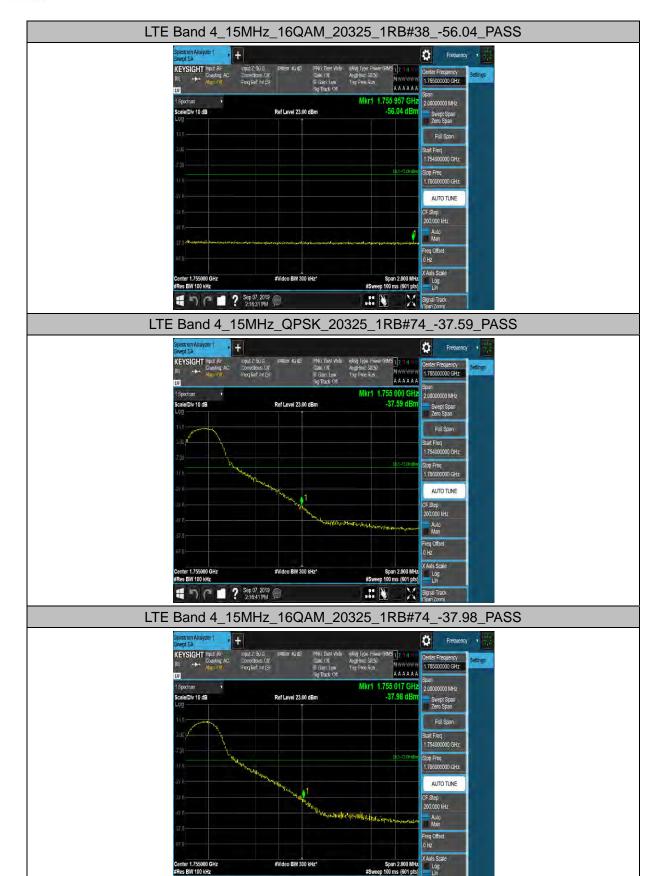


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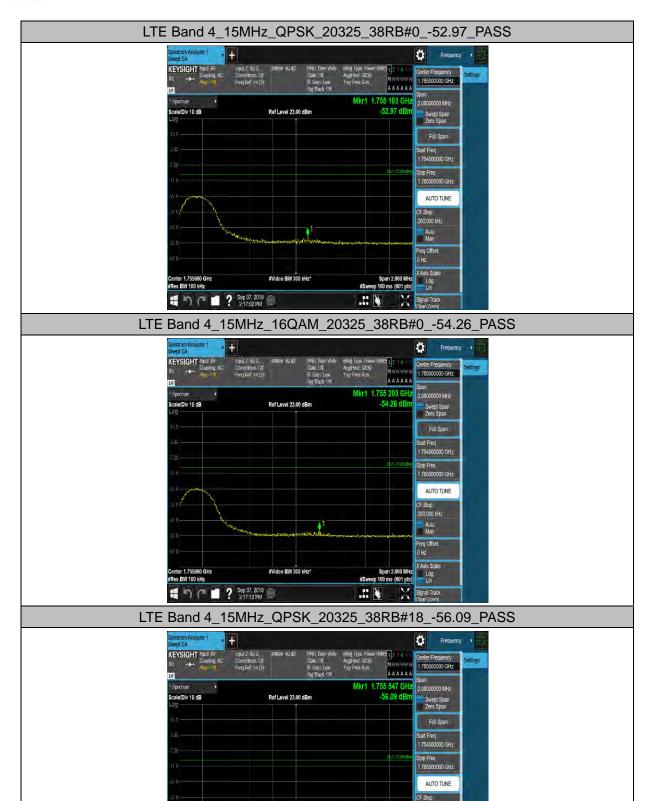






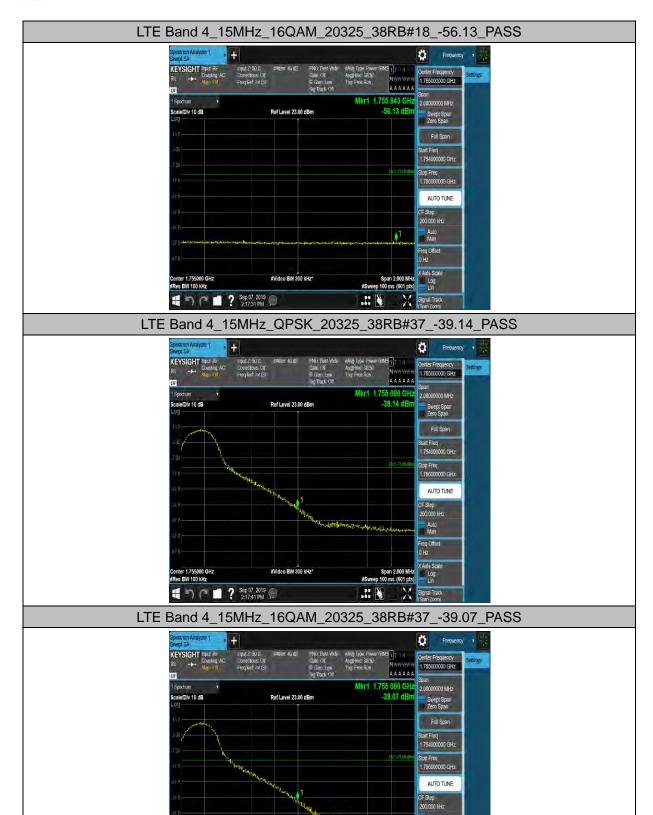
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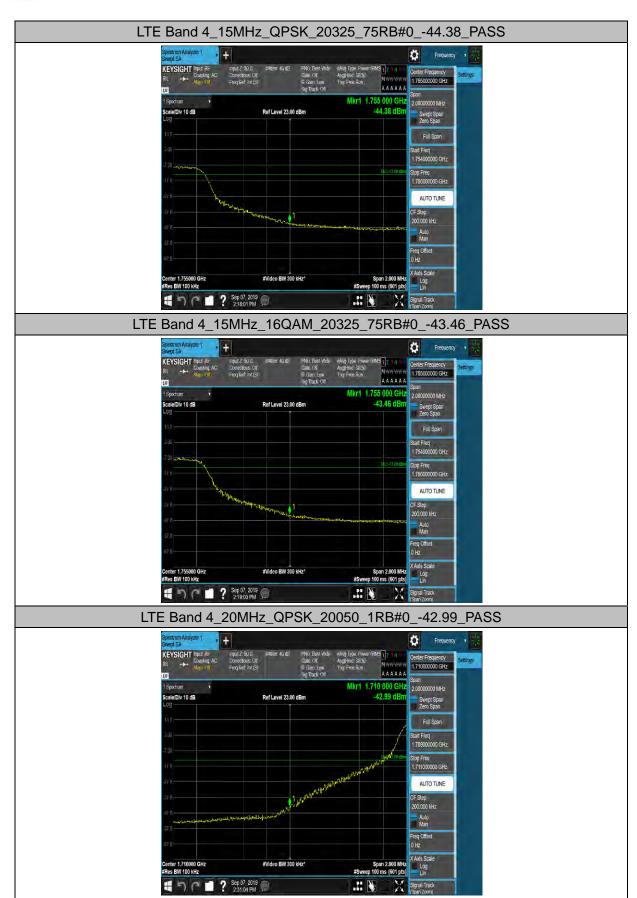
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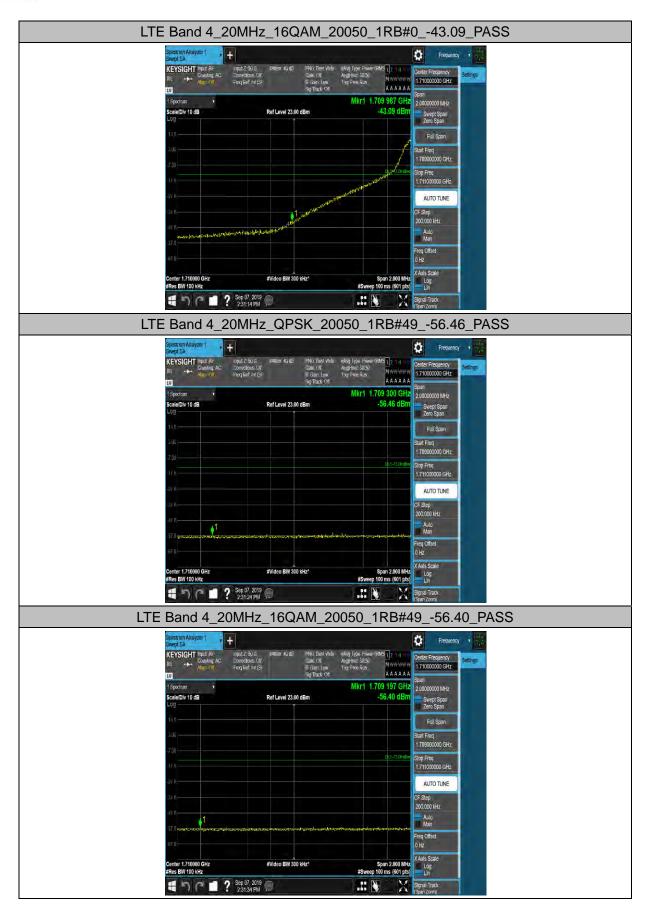
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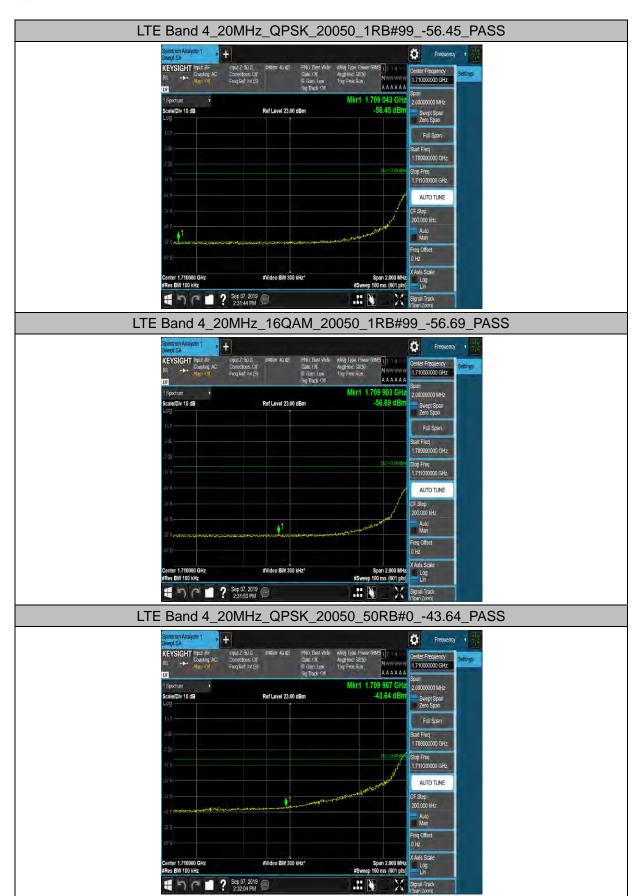


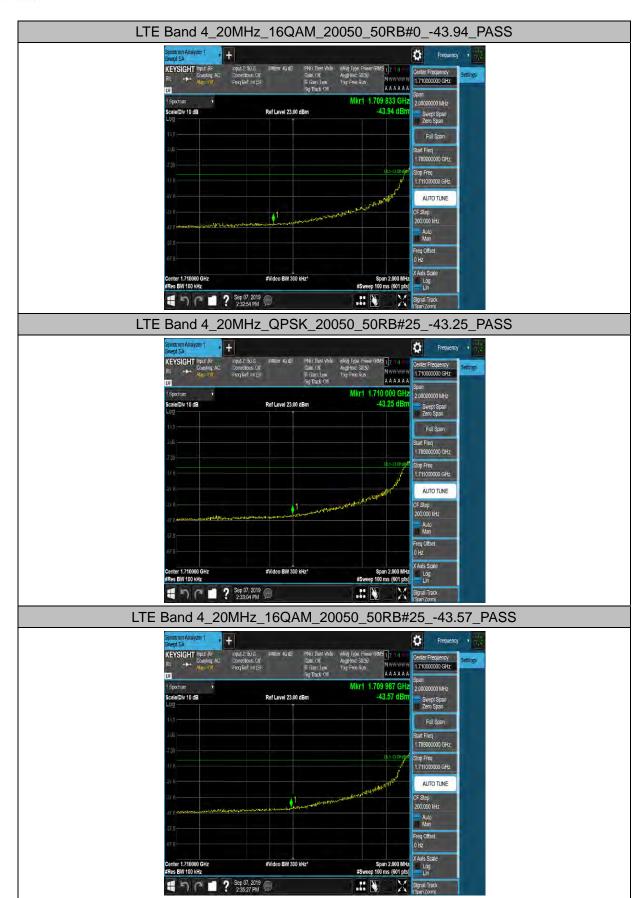
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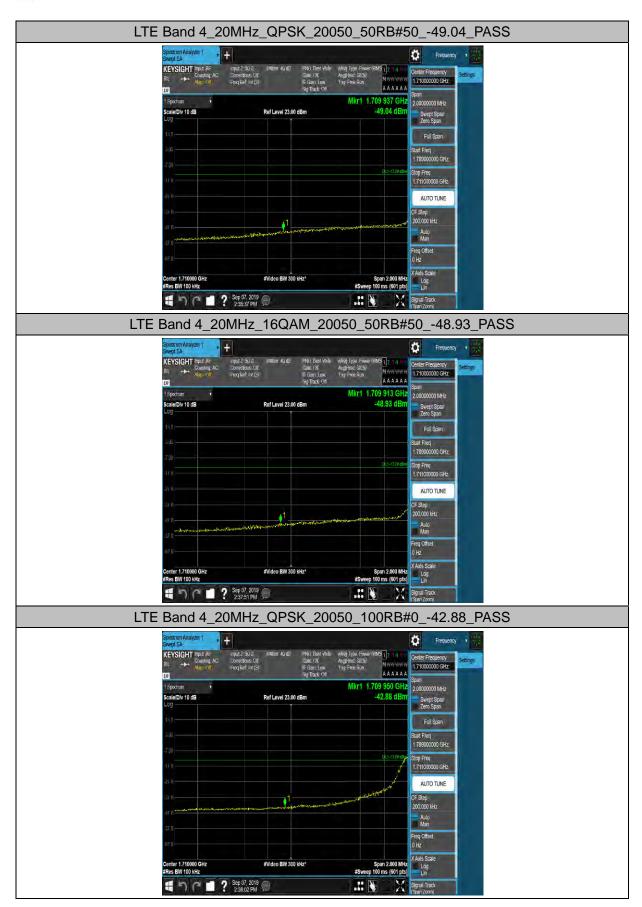
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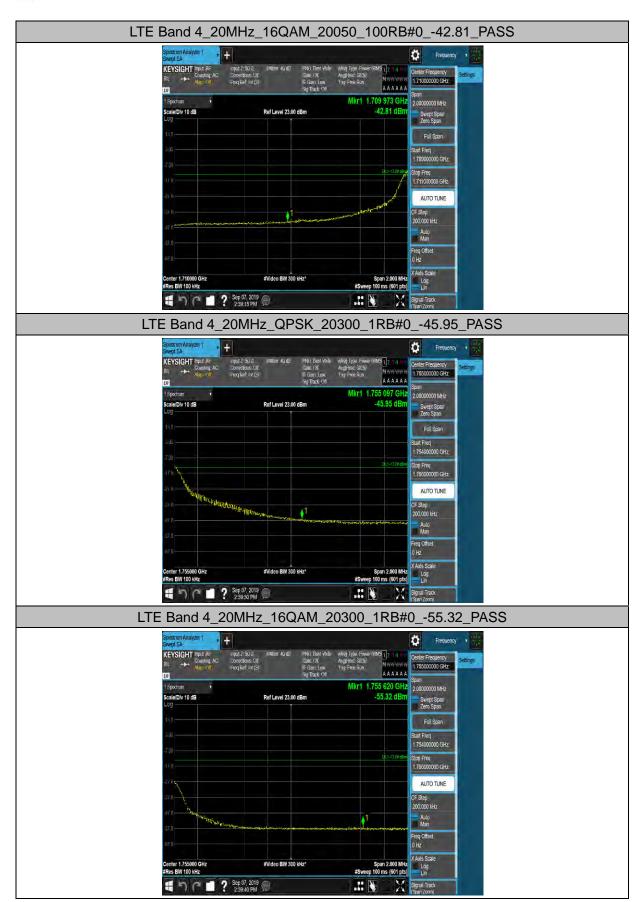


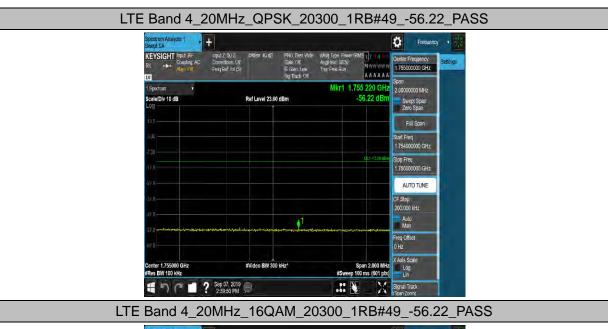






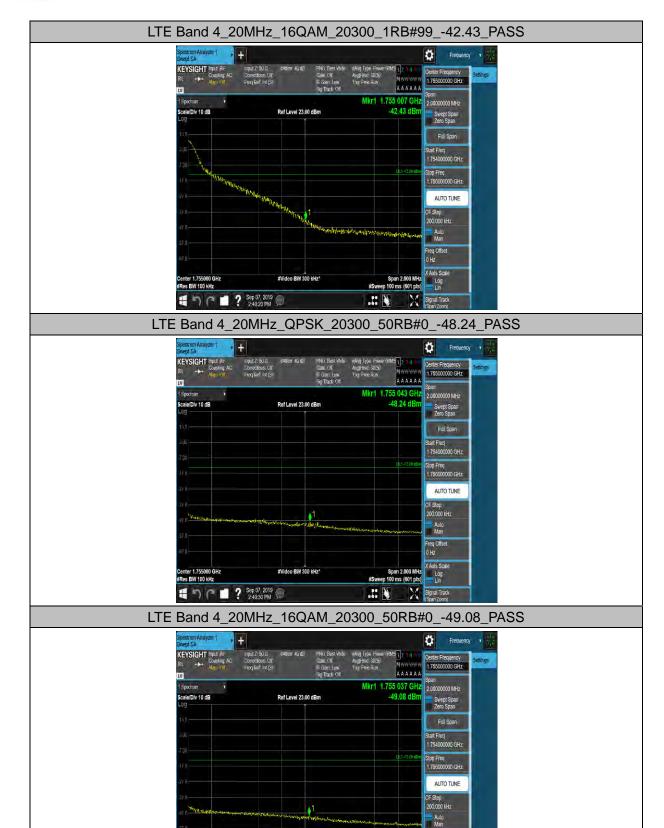






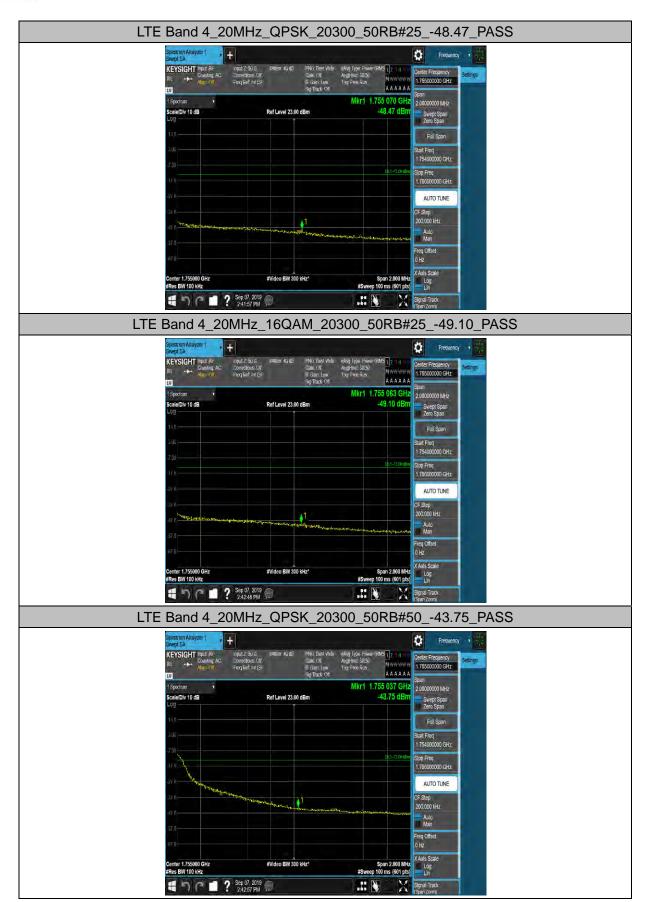


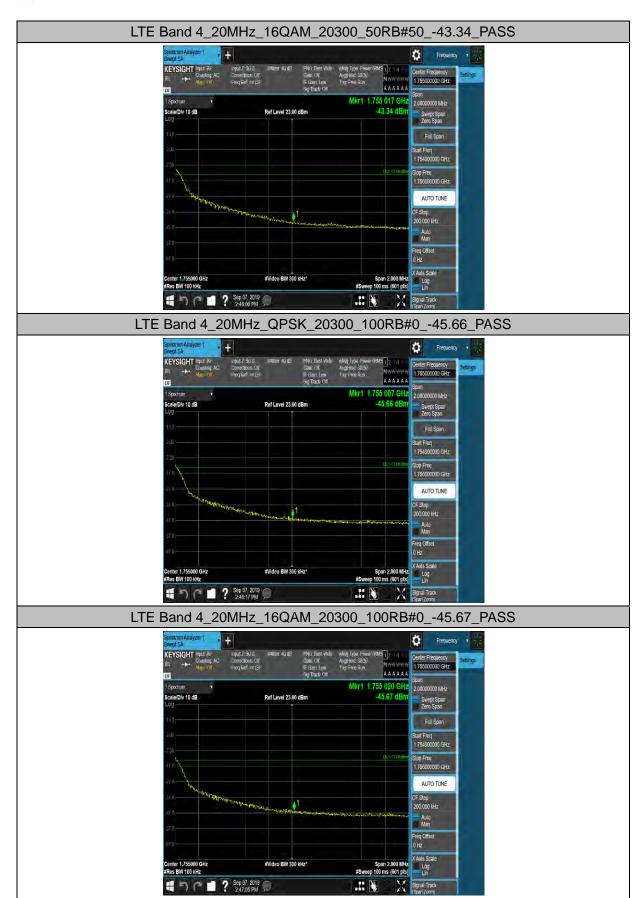


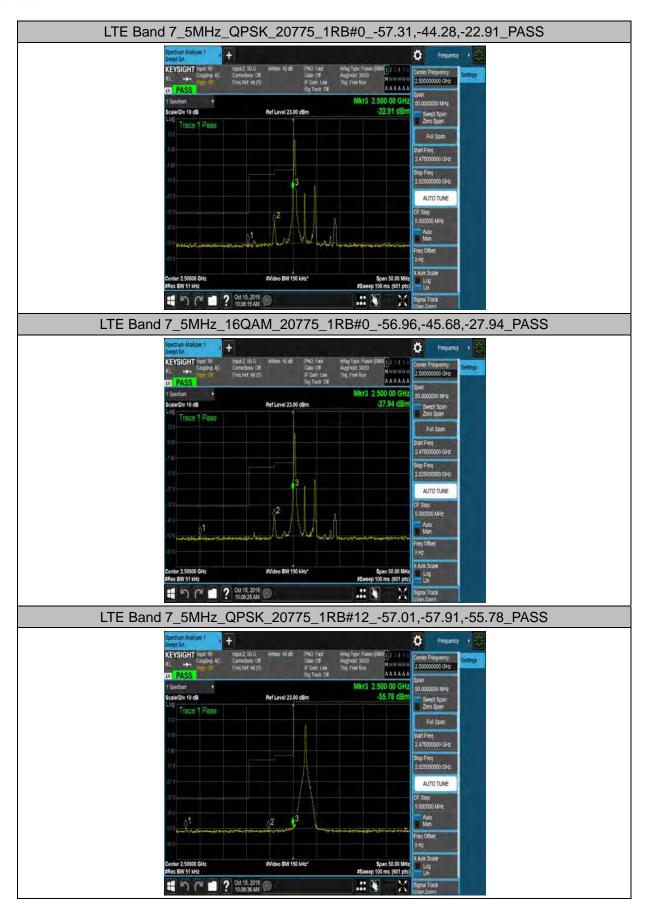


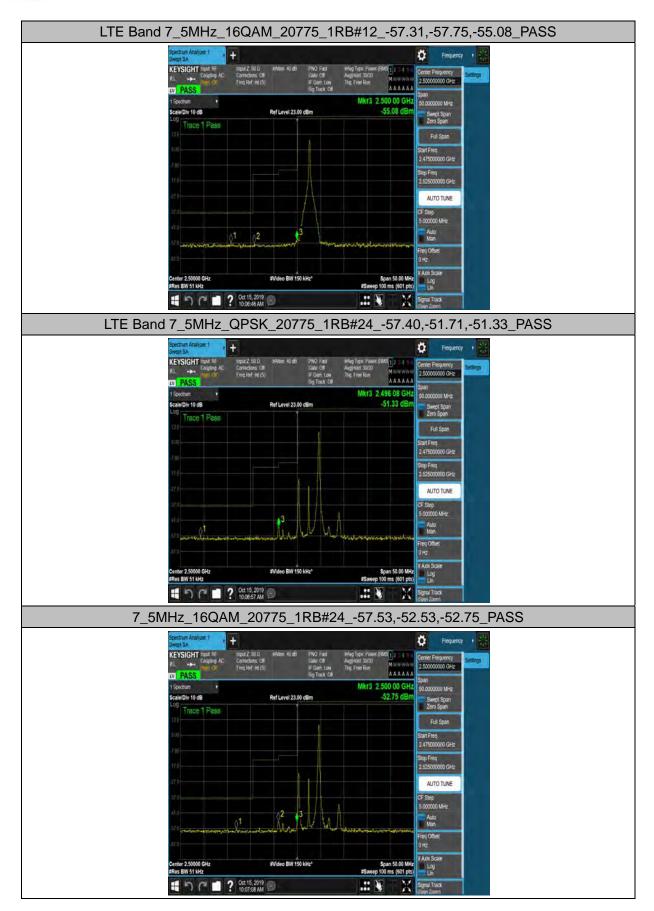
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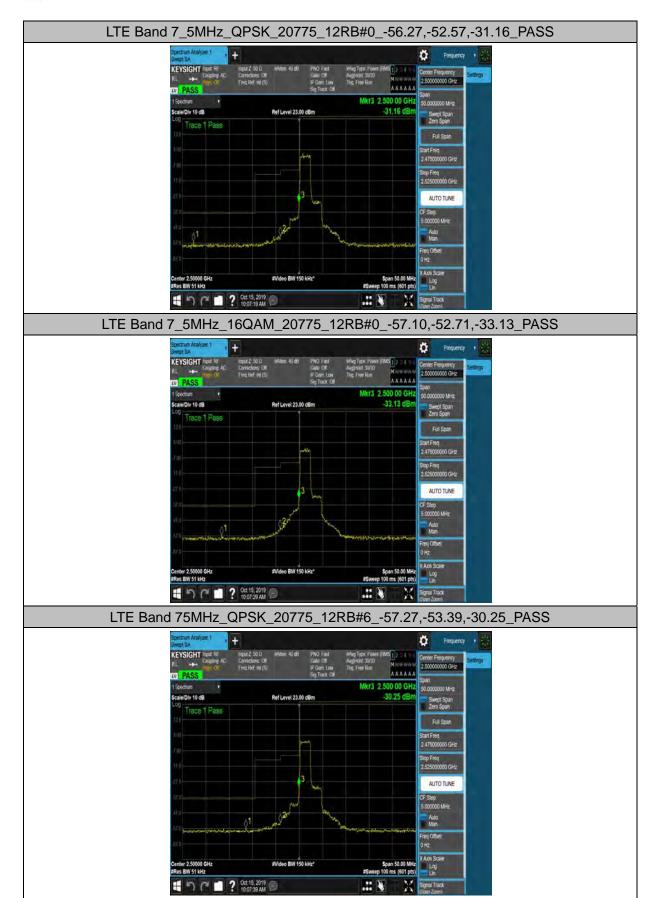
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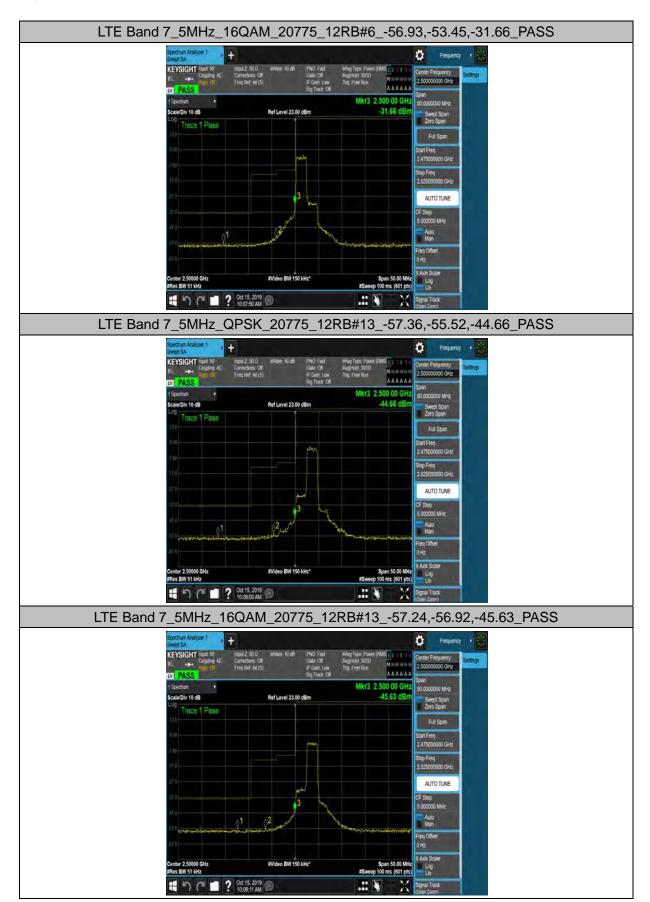


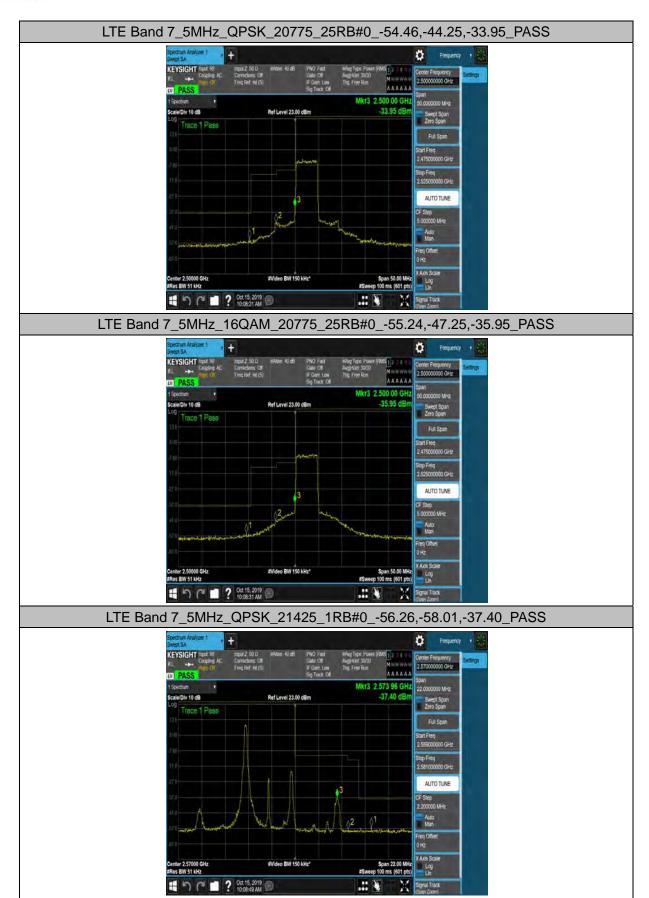




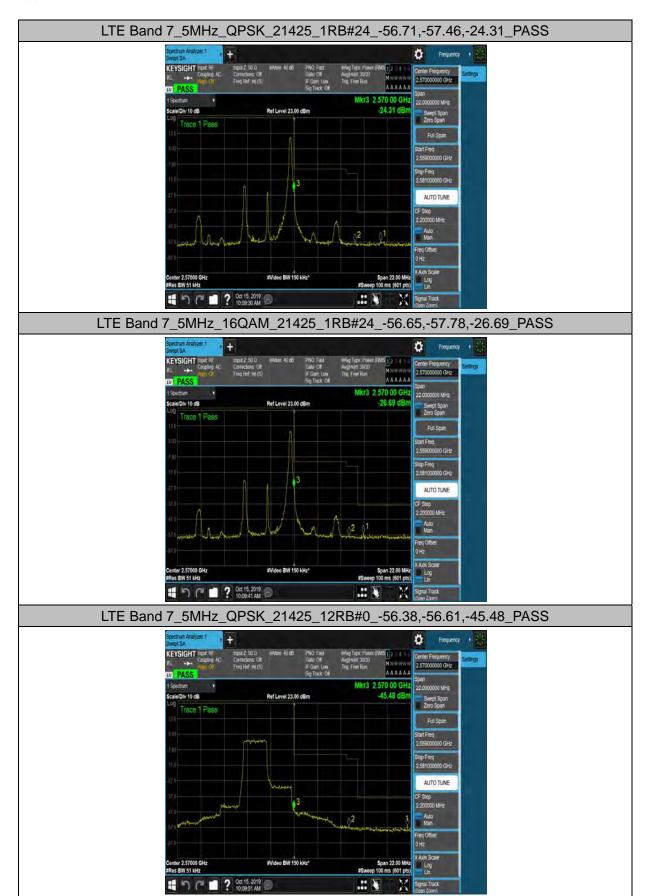


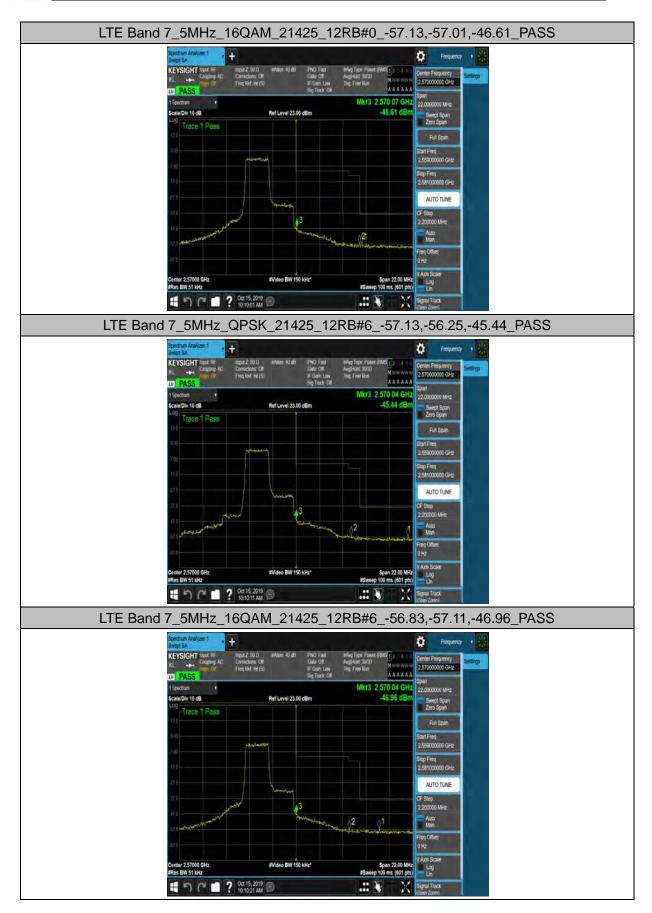


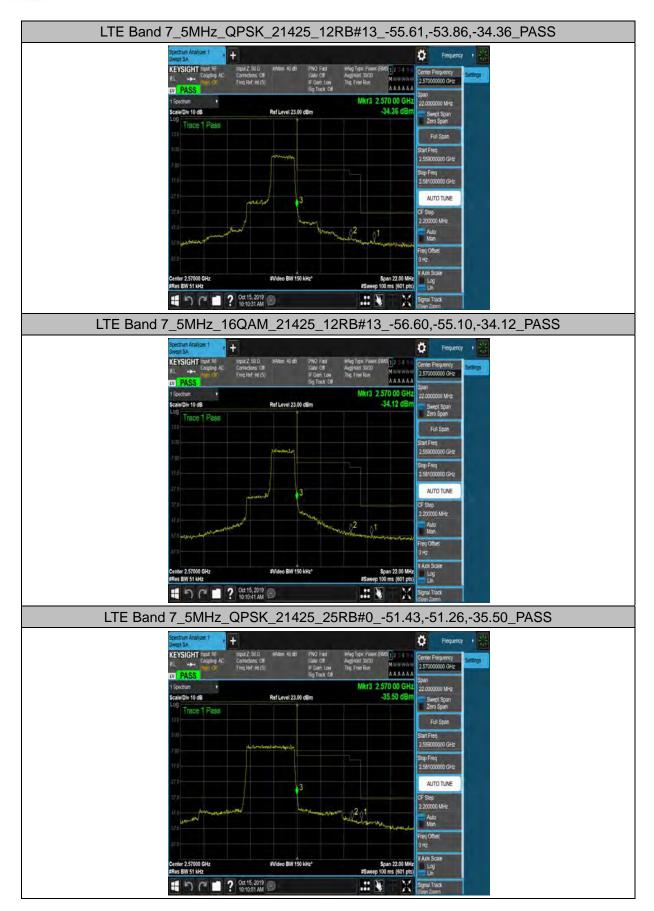


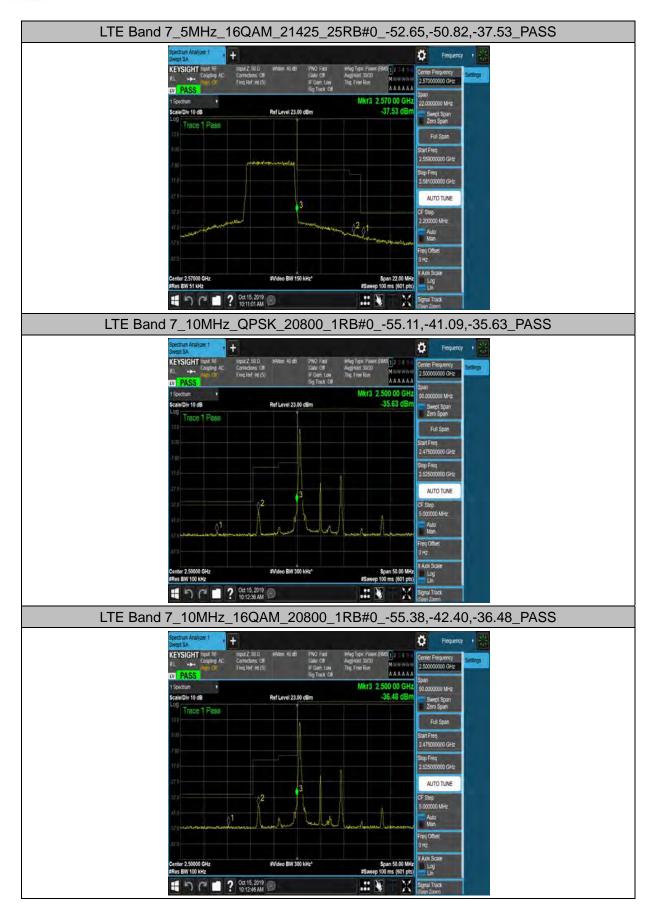


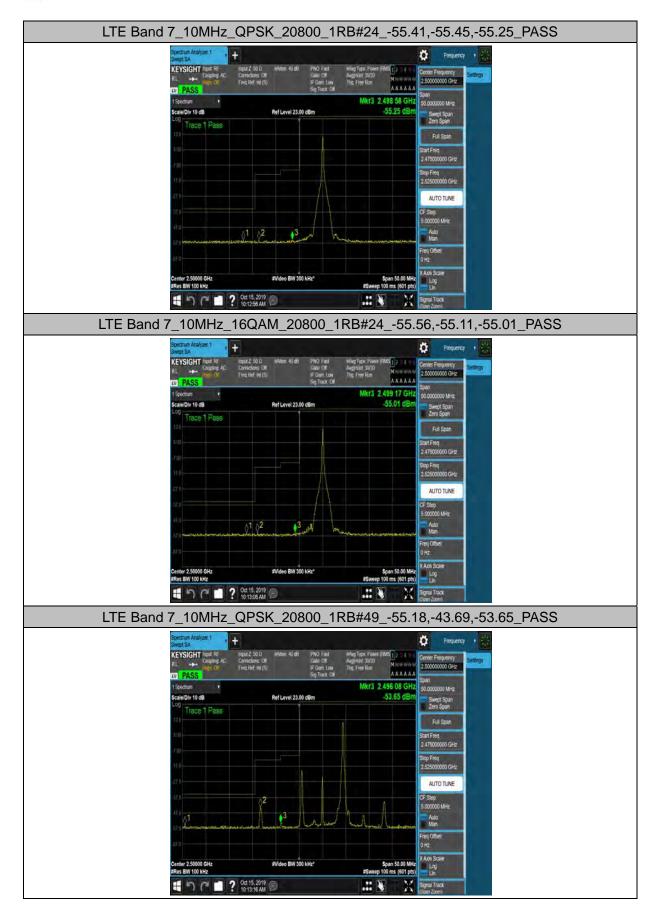


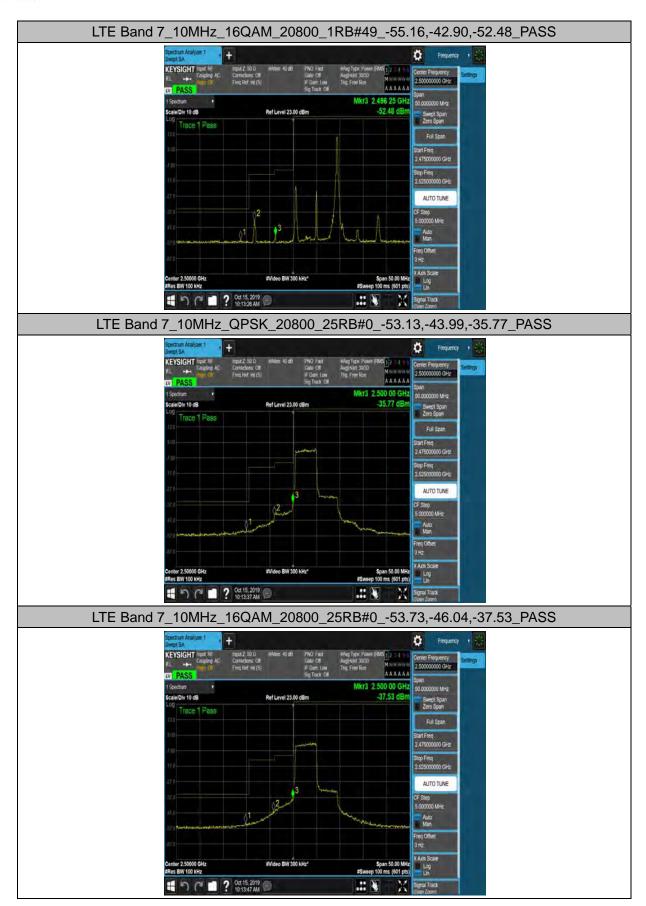


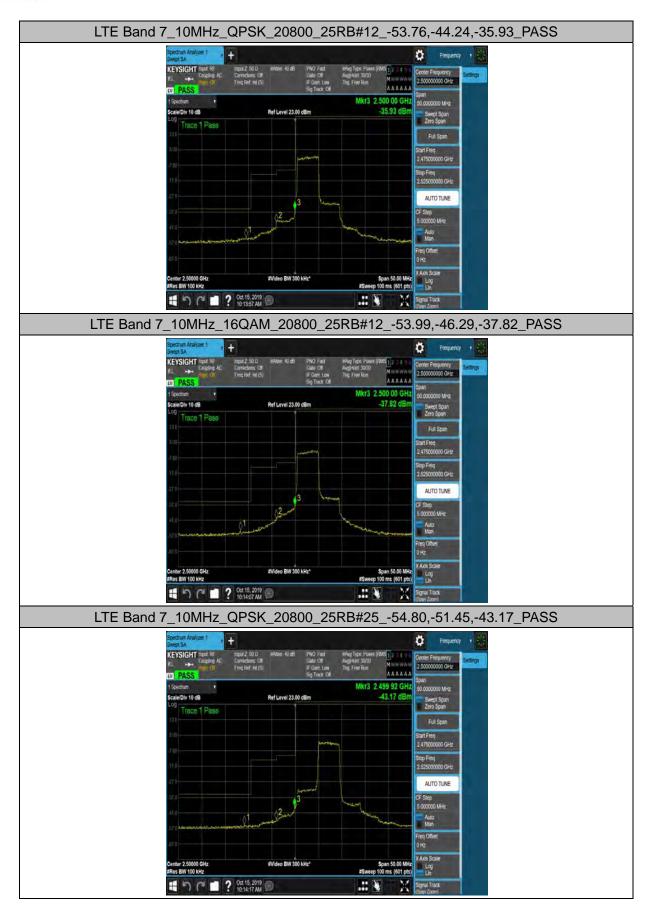


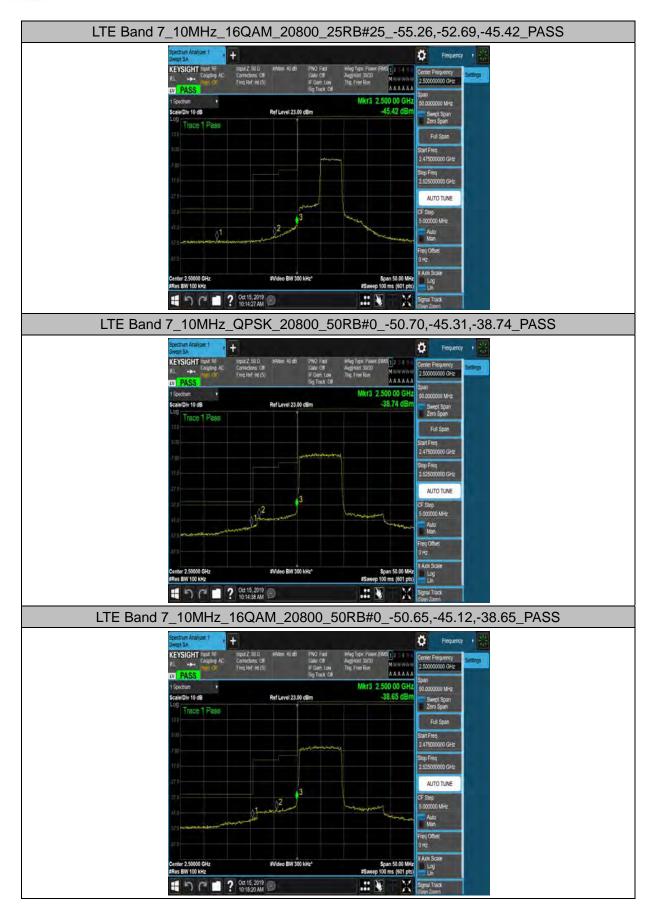


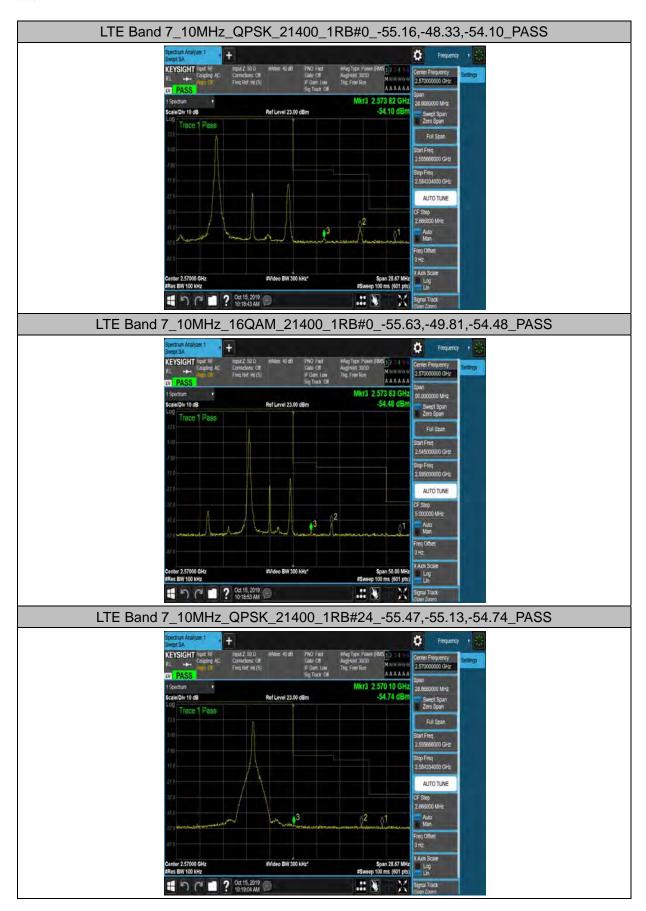


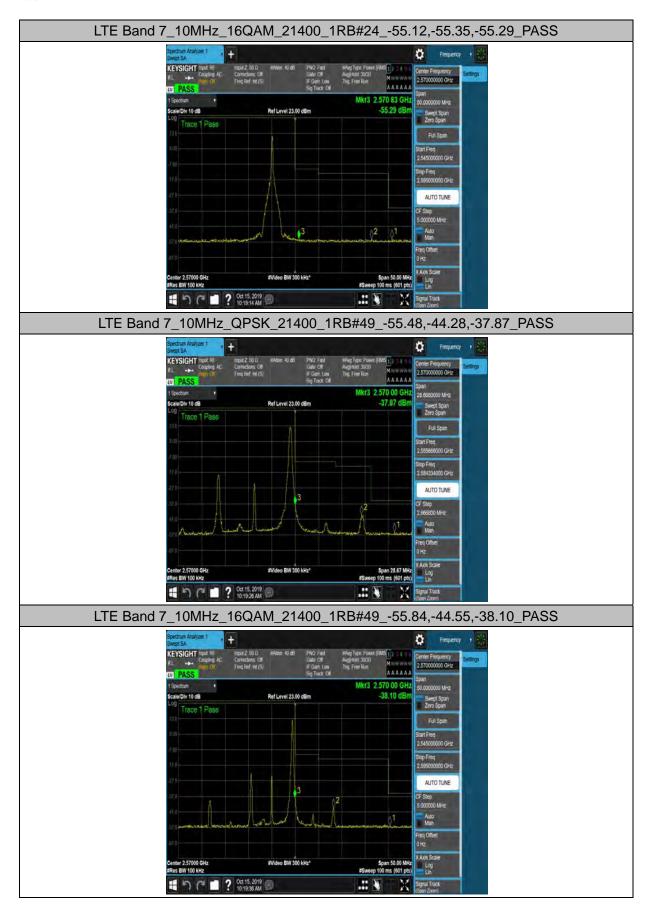


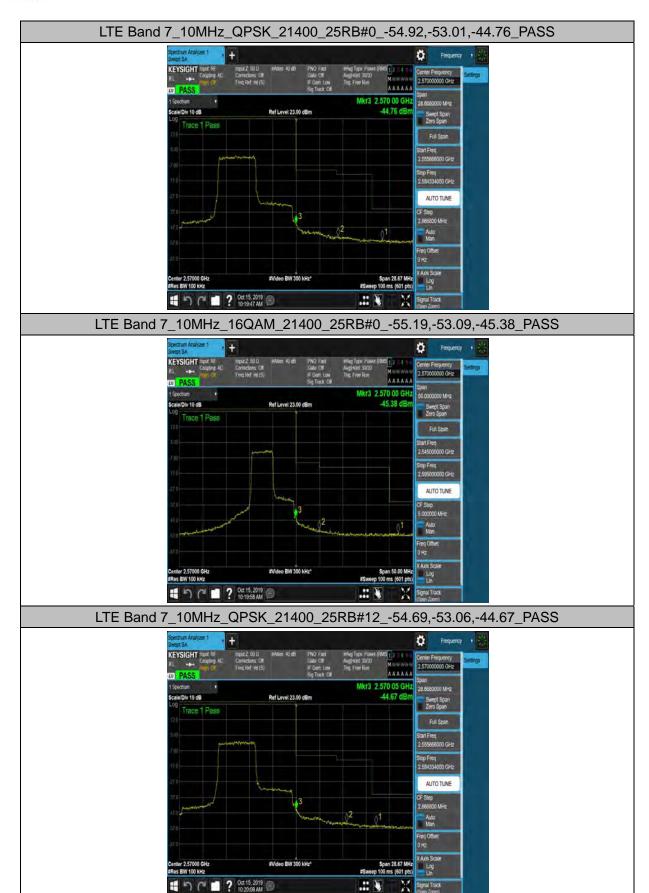














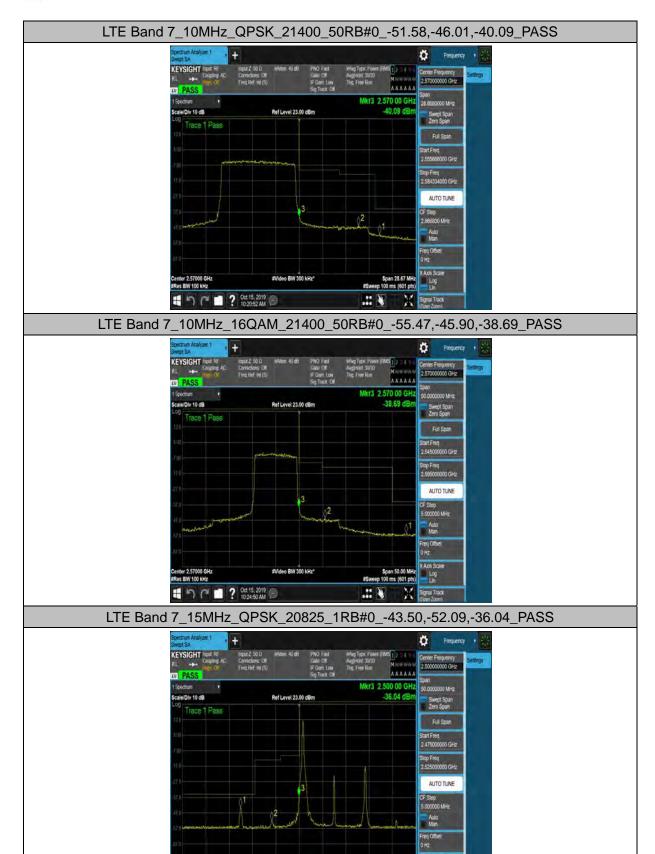


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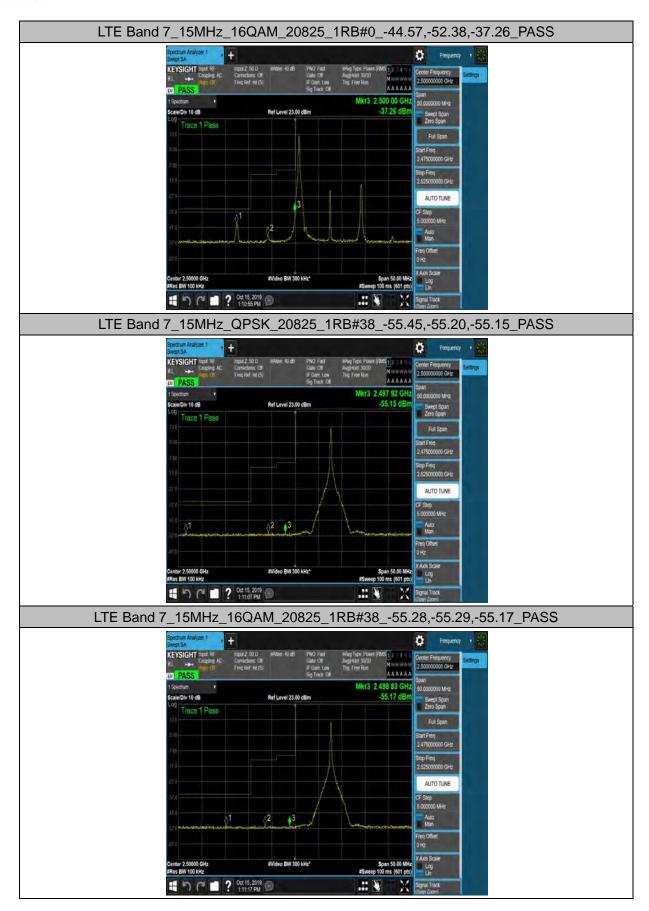


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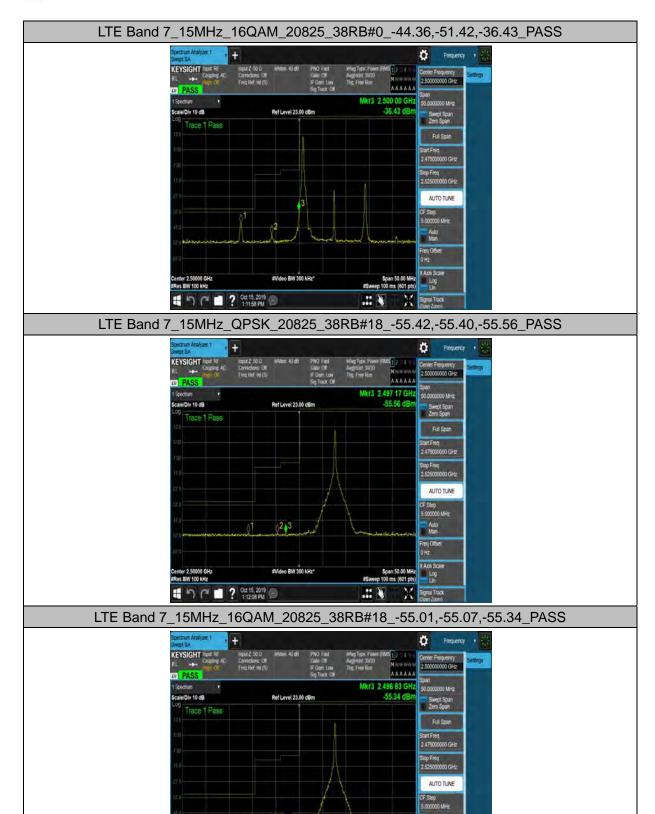




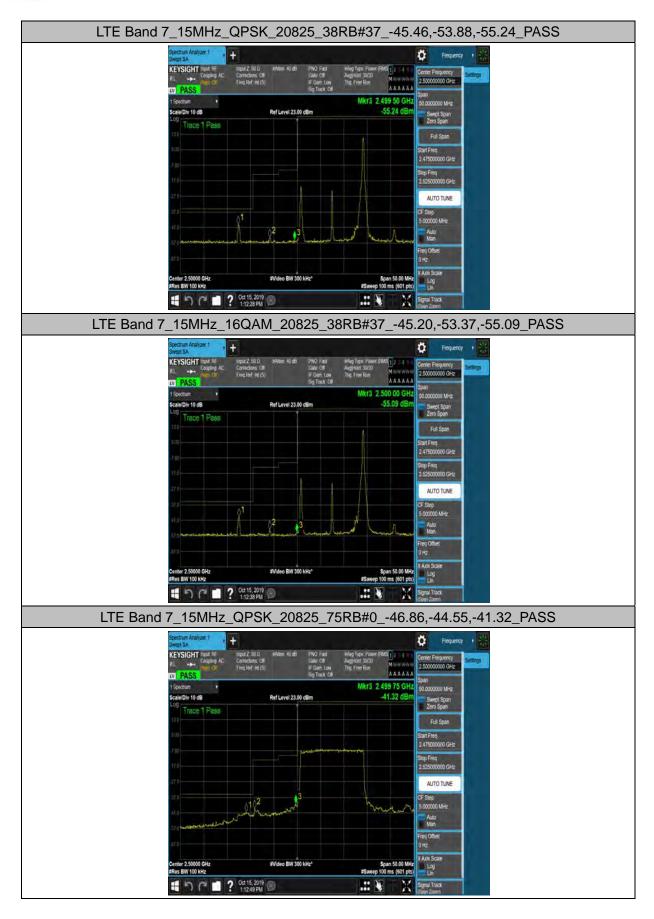
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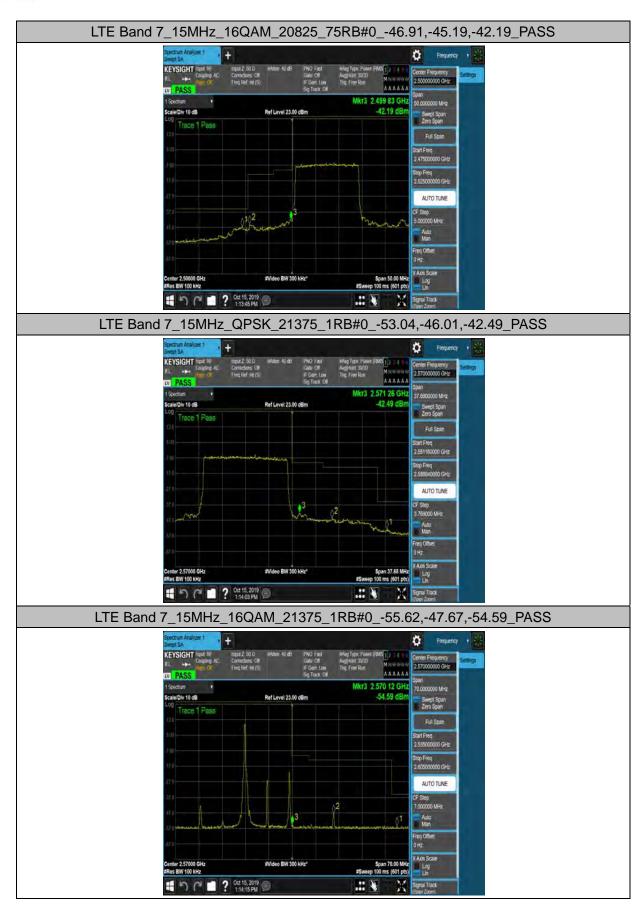


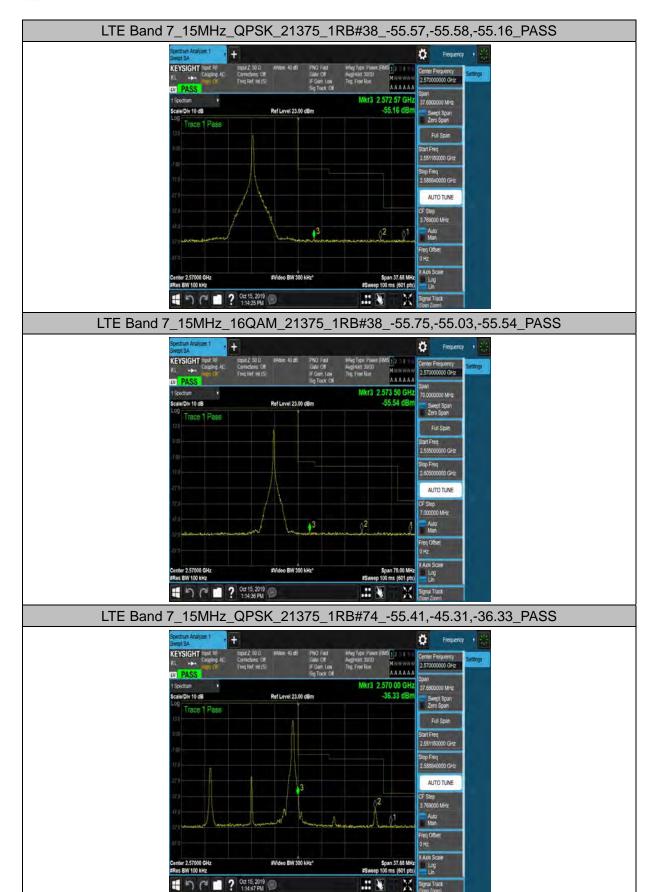


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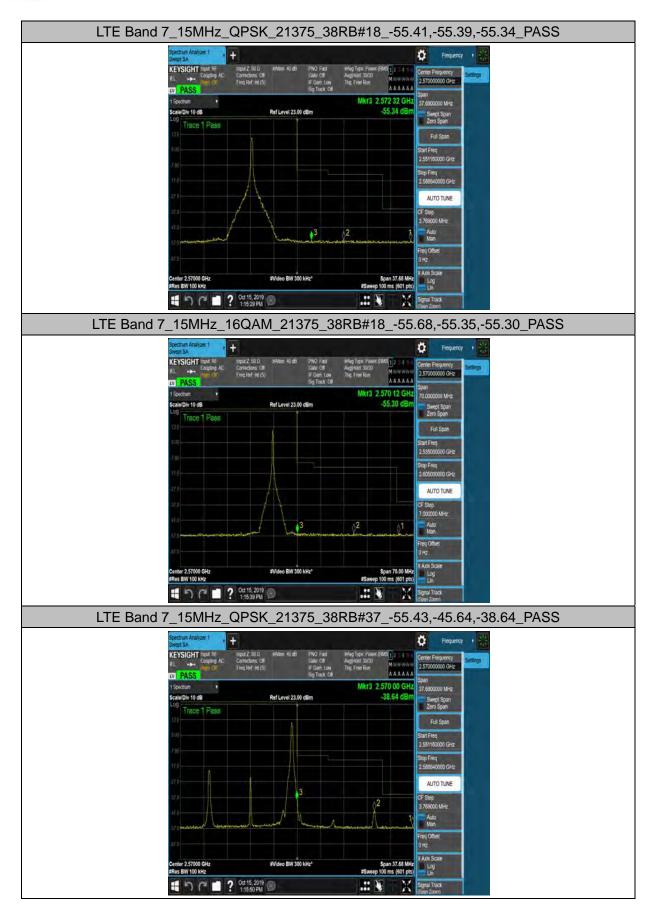


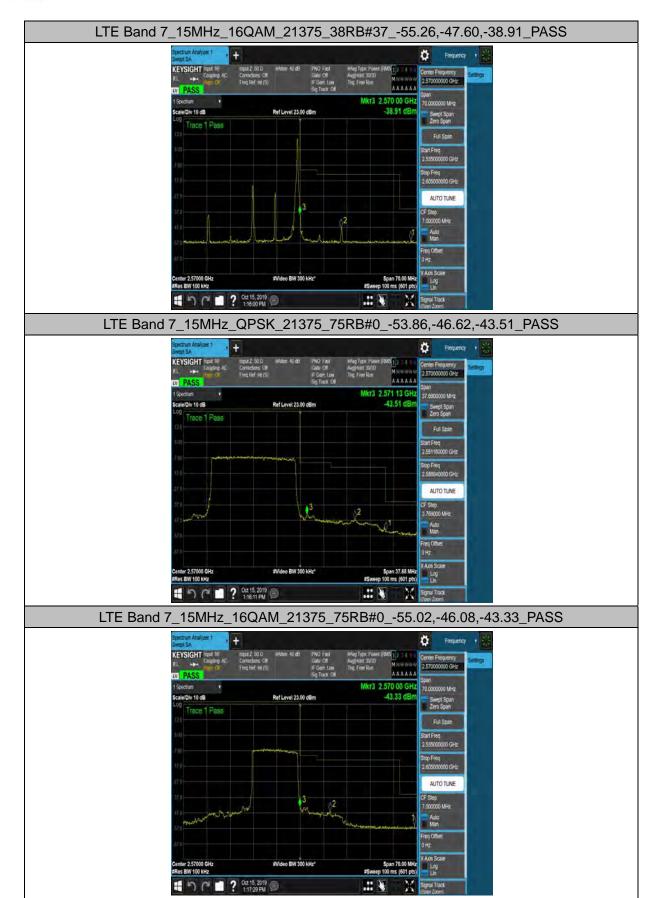
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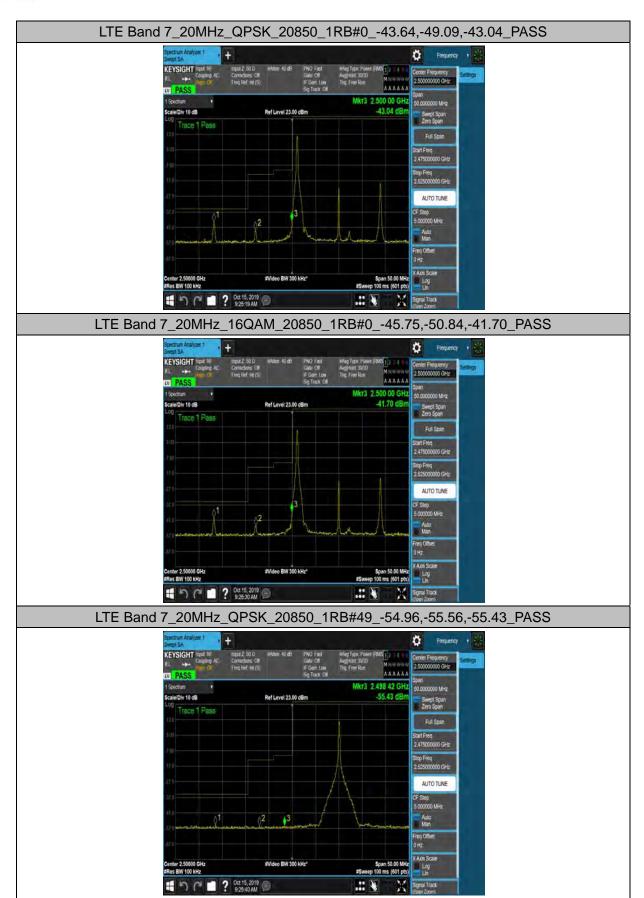


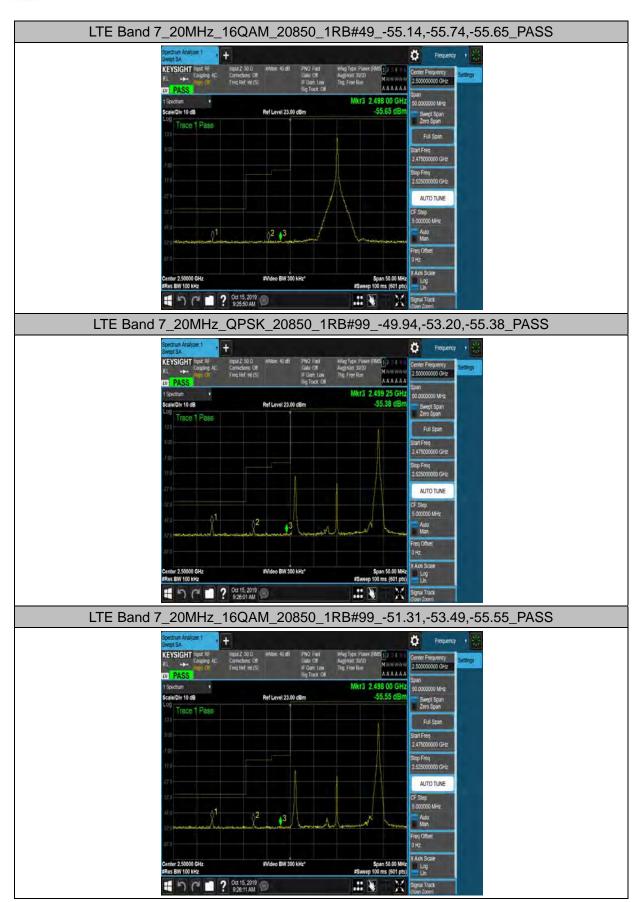


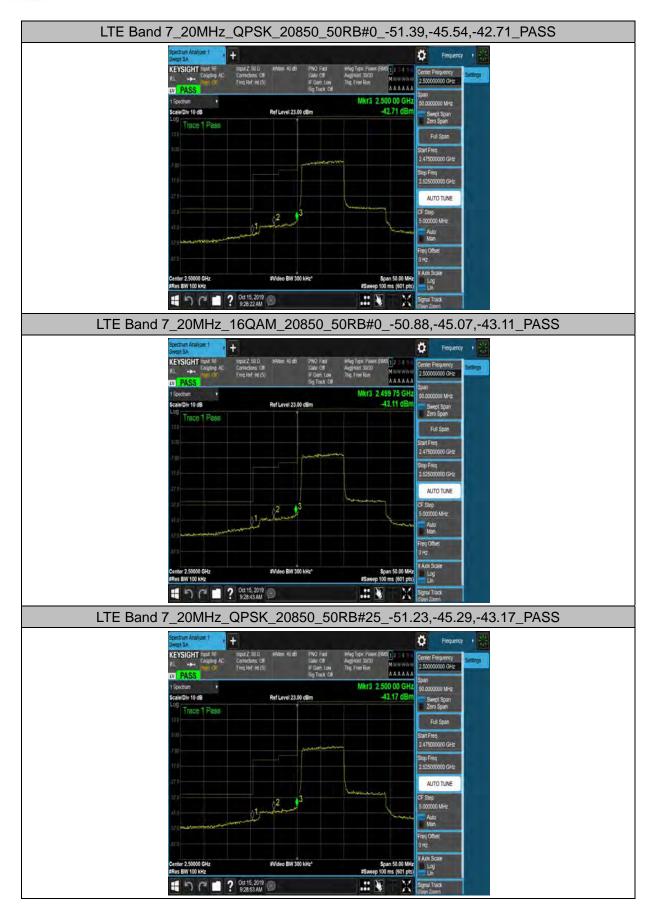








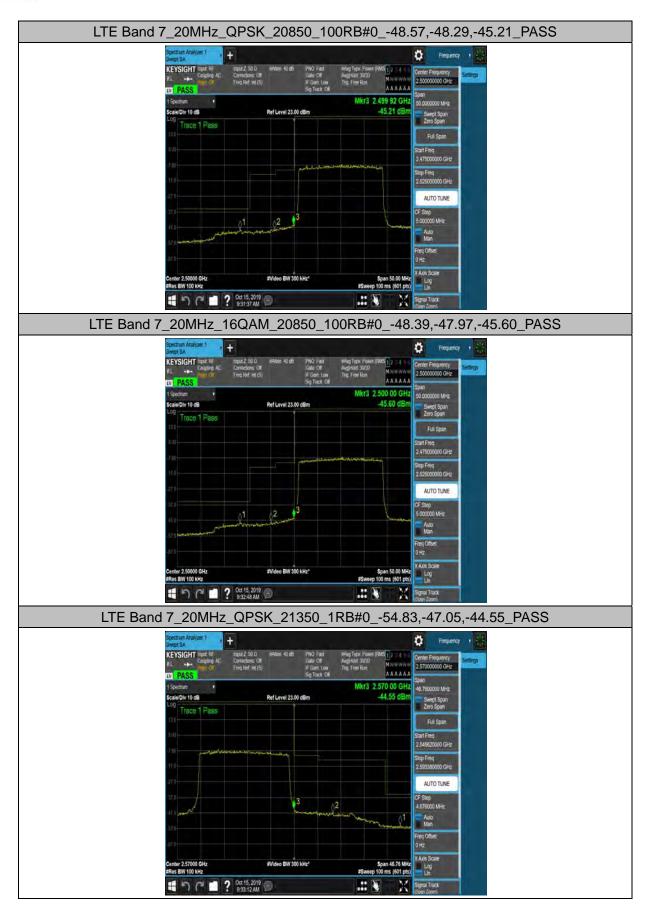


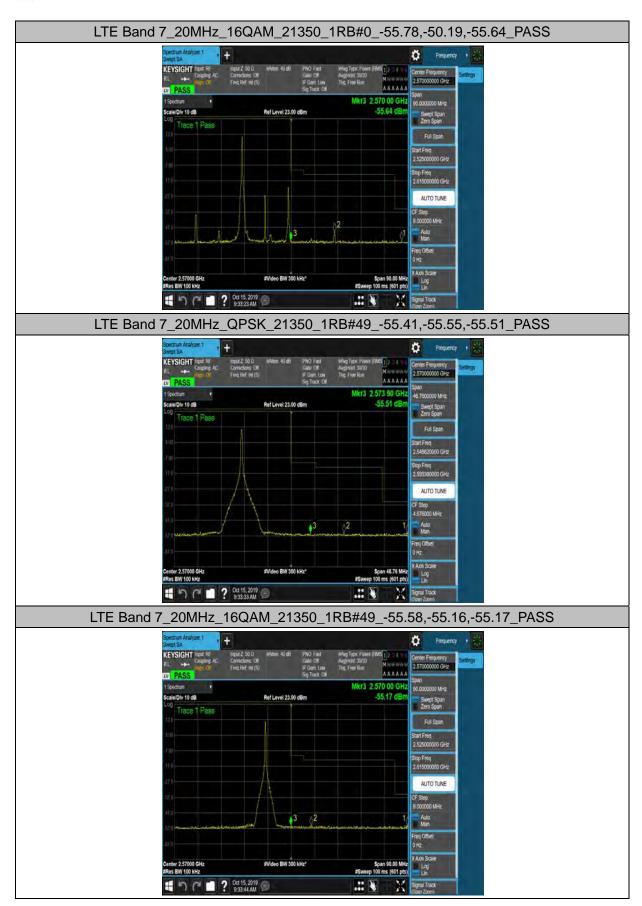




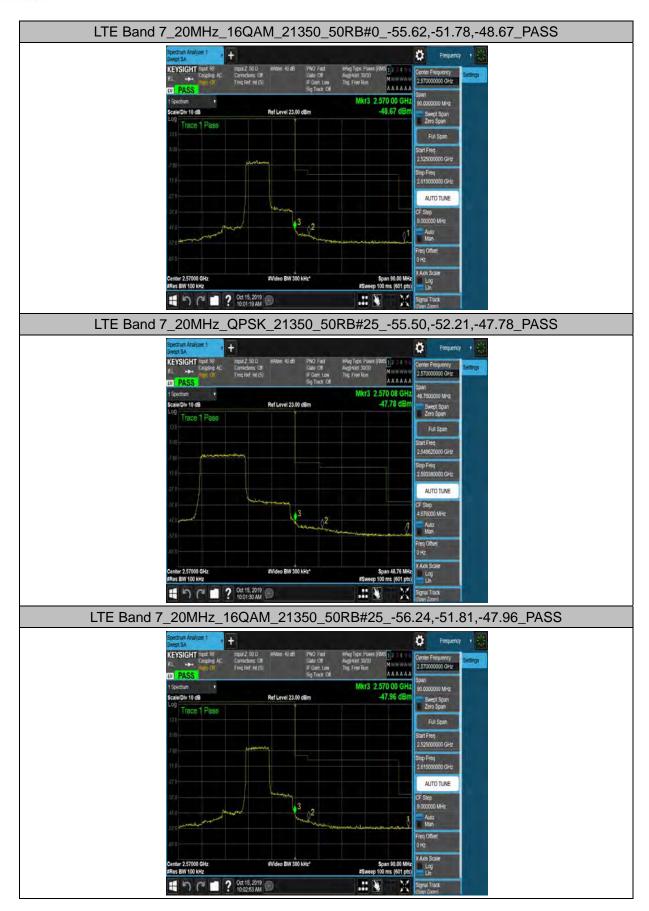


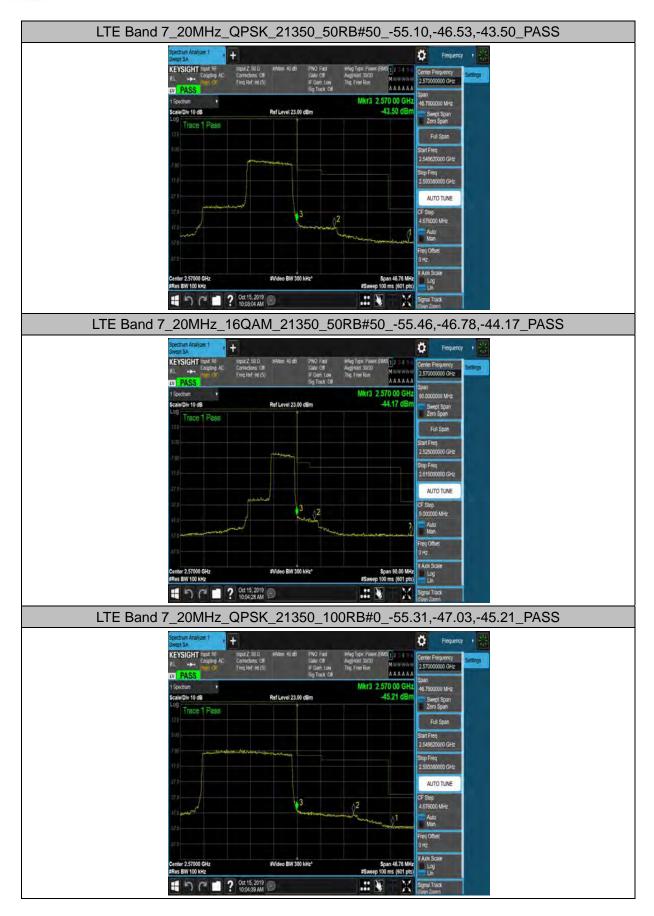


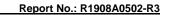


















5.5 Peak-to-Average Power Ratio (PAPR)

Ambient condition

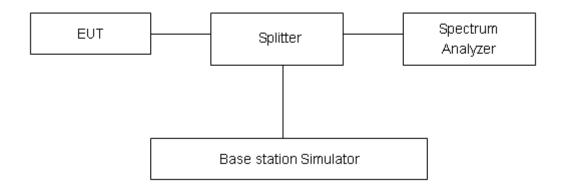
Temperature	Relative humidity	Pressure	
23°C ~25°C	45%~50%	101.5kPa	

Methods of Measurement

Measure the total peak power and record as PPk. And measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:

PAPR (dB) = PPk (dBm) - PAvg (dBm).

Test Setup



Limits

Rule Part 27.50(d)(5) Equipment employed must be authorized in accordance with the provisions of 24.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U = 0.4 dB.



Test Results

Report	No.:	R1908A0502-R3

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
WCDMA Band IV	1312	3.14	13	PASS
WCDMA Band IV	1413	3.08	13	PASS
WCDMA Band IV	1513	3.13	13	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
LTE Band 4	1.4MHz	QPSK	19957	6RB#0	5.23	13	PASS
LTE Band 4	1.4MHz	16QAM	19957	6RB#0	5.18	13	PASS
LTE Band 4	1.4MHz	QPSK	20175	6RB#0	5.01	13	PASS
LTE Band 4	1.4MHz	16QAM	20175	6RB#0	5.95	13	PASS
LTE Band 4	1.4MHz	QPSK	20393	6RB#0	5.09	13	PASS
LTE Band 4	1.4MHz	16QAM	20393	6RB#0	5.14	13	PASS
LTE Band 4	3MHz	QPSK	19965	15RB#0	5.24	13	PASS
LTE Band 4	3MHz	16QAM	19965	15RB#0	5.23	13	PASS
LTE Band 4	3MHz	QPSK	20175	15RB#0	5.01	13	PASS
LTE Band 4	3MHz	16QAM	20175	15RB#0	4.97	13	PASS
LTE Band 4	3MHz	QPSK	20385	15RB#0	5.14	13	PASS
LTE Band 4	3MHz	16QAM	20385	15RB#0	5.18	13	PASS
LTE Band 4	5MHz	QPSK	19975	25RB#0	5.29	13	PASS
LTE Band 4	5MHz	16QAM	19975	25RB#0	5.28	13	PASS
LTE Band 4	5MHz	QPSK	20175	25RB#0	5.04	13	PASS
LTE Band 4	5MHz	16QAM	20175	25RB#0	5.09	13	PASS
LTE Band 4	5MHz	QPSK	20375	25RB#0	5.13	13	PASS
LTE Band 4	5MHz	16QAM	20375	25RB#0	5.13	13	PASS
LTE Band 4	10MHz	QPSK	20000	50RB#0	5.21	13	PASS
LTE Band 4	10MHz	16QAM	20000	50RB#0	5.18	13	PASS
LTE Band 4	10MHz	QPSK	20175	50RB#0	5.11	13	PASS
LTE Band 4	10MHz	16QAM	20175	50RB#0	5.09	13	PASS
LTE Band 4	10MHz	QPSK	20350	50RB#0	5.12	13	PASS
LTE Band 4	10MHz	16QAM	20350	50RB#0	5.13	13	PASS
LTE Band 4	15MHz	QPSK	20025	75RB#0	4.97	13	PASS
LTE Band 4	15MHz	16QAM	20025	75RB#0	4.99	13	PASS
LTE Band 4	15MHz	QPSK	20175	75RB#0	4.92	13	PASS
LTE Band 4	15MHz	16QAM	20175	75RB#0	4.94	13	PASS
LTE Band 4	15MHz	QPSK	20325	75RB#0	4.91	13	PASS
LTE Band 4	15MHz	16QAM	20325	75RB#0	4.92	13	PASS
LTE Band 4	20MHz	QPSK	20050	100RB#0	5.25	13	PASS
LTE Band 4	20MHz	16QAM	20050	100RB#0	5.25	13	PASS
LTE Band 4	20MHz	QPSK	20175	100RB#0	5.32	13	PASS
LTE Band 4	20MHz	16QAM	20175	100RB#0	5.31	13	PASS



LTE Band 4	20MHz	QPSK	20300	100RB#0	5.29	13	PASS
LTE Band 4	20MHz	16QAM	20300	100RB#0	5.28	13	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
LTE Band 7	5MHz	QPSK	20775	25RB#0	5.14	13	PASS
LTE Band 7	5MHz	16QAM	20775	25RB#0	5.04	13	PASS
LTE Band 7	5MHz	QPSK	21100	25RB#0	5.20	13	PASS
LTE Band 7	5MHz	16QAM	21100	25RB#0	5.19	13	PASS
LTE Band 7	5MHz	QPSK	21425	25RB#0	5.22	13	PASS
LTE Band 7	5MHz	16QAM	21425	25RB#0	5.13	13	PASS
LTE Band 7	10MHz	QPSK	20800	50RB#0	5.04	13	PASS
LTE Band 7	10MHz	16QAM	20800	50RB#0	5.05	13	PASS
LTE Band 7	10MHz	QPSK	21100	50RB#0	5.13	13	PASS
LTE Band 7	10MHz	16QAM	21100	50RB#0	5.16	13	PASS
LTE Band 7	10MHz	QPSK	21400	50RB#0	5.20	13	PASS
LTE Band 7	10MHz	16QAM	21400	50RB#0	5.16	13	PASS
LTE Band 7	15MHz	QPSK	20825	75RB#0	4.96	13	PASS
LTE Band 7	15MHz	16QAM	20825	75RB#0	4.97	13	PASS
LTE Band 7	15MHz	QPSK	21100	75RB#0	5.02	13	PASS
LTE Band 7	15MHz	16QAM	21100	75RB#0	5.00	13	PASS
LTE Band 7	15MHz	QPSK	21375	75RB#0	5.00	13	PASS
LTE Band 7	15MHz	16QAM	21375	75RB#0	5.02	13	PASS
LTE Band 7	20MHz	QPSK	20850	100RB#0	5.29	13	PASS
LTE Band 7	20MHz	16QAM	20850	100RB#0	5.30	13	PASS
LTE Band 7	20MHz	QPSK	21100	100RB#0	5.33	13	PASS
LTE Band 7	20MHz	16QAM	21100	100RB#0	5.32	13	PASS
LTE Band 7	20MHz	QPSK	21350	100RB#0	5.33	13	PASS
LTE Band 7	20MHz	16QAM	21350	100RB#0	5.34	13	PASS



5.6 Frequency Stability

Ambient condition

Temperature	Relative humidity	Pressure		
23°C ~25°C	45%~50%	101.5kPa		

Method of Measurement

Frequency Stability (Temperature Variation)

The temperature inside the climate chamber is varied from -40°C to +85°C in 10°C step size.

- (1)With all power removed, the temperature was decreased to -10°C and permitted to stabilize for three hours.
- (2)Measure the carrier frequency with the test equipment in a "call mode". These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.
- (3) Repeat the above measurements at 10°C increments from -40°C to +85°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements.

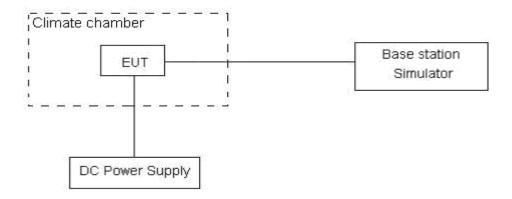
Frequency Stability (Voltage Variation)

The frequency stability shall be measured with variation of primary supply voltage as follows:

- (1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.
- (2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery-operating end point which shall be specified by the manufacturer.

This transceiver is specified to operate with an input voltage of between 3.3 V and 4.3 V, with a nominal voltage of 3.8V.

Test setup



Limits

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor k = 3, U = 0.01 ppm.